

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application☐ Supplemental (37 C.F.R. §1.67)I,                     , a named inventor, I hereby declare that:

My residence, mailing address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 2 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled

Damage Tolerance Using Adaptive Model-Based Methods

the specification of which (check one)

☐ is attached hereto.☒ was filed on January 22, 2004 as United States Application Number 10/763,573.☐ was filed on [PCT Filing Date] as PCT International Application No. [PCT Appl'n No.] [and assigned United States Application No. [ ]].☐ and was amended on [ ] (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. §1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119 or 365 of any foreign application(s) for patent or inventor's certificate, or of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed:

<u>Prior Foreign Application(s)</u>			Priority Not Claimed	Certified Copy Filed?	
				YES	NO
<u>                    </u> (Number)	<u>                    </u> (Country)	<u>                    </u> (Day/Month/Year filed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>                    </u> (Number)	<u>                    </u> (Country)	<u>                    </u> (Day/Month/Year filed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>                    </u> (Number)	<u>                    </u> (Country)	<u>                    </u> (Day/Month/Year filed)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole

or first inventor Neil J. Goldfine

Inventor's Signature *Neil J. Goldfine* Date 5/25/04

Residence 141 Evelyn Road

Newton, Massachusetts 02468

Citizenship USA

Mailing Address same

Full name of second joint

inventor, if any Vladimir A. Zilberstein

Inventor's Signature *Vladimir A. Zilberstein* Date 5/26/04

Residence 145 Bellingham Road

Chestnut Hill, Massachusetts 02467

Citizenship USA

Mailing Address same

Full name of third joint

inventor, if any David C. Grundy

Inventor's Signature *David C. Grundy* Date 04 MAY 11

Residence 13 Willow Street

Reading, Massachusetts 01867

Citizenship USA

Mailing Address same

Full name of fourth joint

inventor, if any Andrew P. Washabaugh

Inventor's Signature *Andrew P. Washabaugh* Date 5/27/04

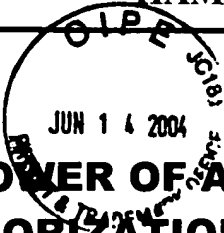
Residence 1413 Granite Springs Drive

Chula Vista, California 91915

Citizenship USA

Mailing Address same

**HAMILTON, BROOK, SMITH & REYNOLDS, P.C.**



**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT AND  
CORRESPONDENCE ADDRESS**

<i>Application Number</i>	10/763,573
<i>Filing Date</i>	January 22, 2004
<i>First Named Inventor</i>	Neil J. Goldfine
<i>Confirmation Number</i>	4895
<i>Group Art Unit</i>	2857
<i>Examiner Name</i>	Not assigned
<i>Attorney Docket Number</i>	1884.2021-001

<i>Title</i>	DAMAGE TOLERANCE USING ADAPTIVE MODEL-BASED METHODS
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I/We hereby appoint

- ☒ the attorneys/agents associated with **Customer No. 021005**  
☐ Practitioner(s) named below:

as my/our attorneys/agents to prosecute the application identified above, including any continuation or divisional applications thereof, and to transact all business in the United States Patent and Trademark Office connected therewith.

The correspondence address for the above-identified application is:

- ☒ Customer Number 021005  
 Hamilton, Brook, Smith & Reynolds, P.C.  
 530 Virginia Road  
 P.O. Box 9133  
 Concord, Massachusetts 01742-9133  
☐ Other \_\_\_\_\_

Please direct all telephone calls and facsimiles to:

Name James M. Smith, Esq. Tel. No. 978-341-0036 Fax No. 978-341-0136

I am the:

- ☐ Applicant/Inventor.  
☒ Authorized representative of the Assignee, JENTEK Sensors, Inc., of the entire interest. See 37 C.F.R. § 3.71. A Statement under 37 C.F.R. § 3.73(b) is enclosed.  
☐ Authorized representative of the Assignee, [ ], together with [ ], of the entire interest. A Statement under 37 C.F.R. § 3.73(b) is enclosed.

**SIGNATURE of Applicant or Assignee of Record**

Name & Title	Joni Hatem, Vice President
Signature	
Date	6/17/04



Docket No. 1884.2021-001

STATEMENT UNDER 37 C.F.R. § 3.73(b)

Inventor(s): Neil J. Goldfine, Vladimir A. Zilberstein, David C. Grundy and Andrew P. Washabaugh

Application No./Patent No.: 10/763,573 Filed/Issue Date: January 22, 2004

For: DAMAGE TOLERANCE USING ADAPTIVE MODEL-BASED METHODS

JENTEK Sensors, Inc., a corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

- A. ☒ the assignee of the entire right, title and interest in the patent application identified above; or
- B. ☐ an assignee together with ☐ of the entire right, title and interest in the patent application identified above.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

- ☐ Additional documents in the chain of title are listed on a supplemental sheet.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date: 6/17/04

Name: Voni Determ

Title: Vice President

Signature: [Signature]

ASSIGNMENT**COPY**

WHEREAS, we, **Neil J. Goldfine, Vladimir A. Zilberstein, David C. Grundy and Andrew P. Washabaugh**, have invented a certain improvement in **Damage Tolerance Using Adaptive Model-Based Methods** described in an application for Patent,

- ☐ the specification of which is being executed on even date herewith and is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- ☐ is about to be filed in the United States Patent Office as a Provisional Application;
- ☒ the specification of which is United States Application No. **10/763,573**, filed **January 22, 2004**;
- ☐ the specification of which is a Patent Cooperation Treaty Application, International Application No. [   ], which designates the United States of America;
- ☐ which was patented under United States Patent No. [   ].

WHEREAS, **JENTEK Sensors, Inc.** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **110-1 Clematis Avenue, Waltham, Massachusetts, 02453-7013**, desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts

which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature:

  
Neil J. Goldfine

State/Commonwealth

of Massachusetts

County of Middlesex

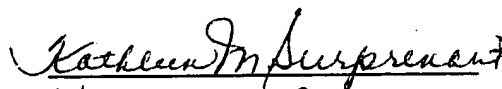
On this 25th day of May, 20 04, before me, the undersigned notary public, personally appeared **Neil J. Goldfine**,

☒ personally known to me, or

☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

 Notary Public

Kathleen M. Surprenant (print name)

My Commission expires 1/12/2010

Inventor's Signature: Vladimir A. Zilberstein  
Vladimir A. Zilberstein

State/Commonwealth  
of Massachusetts  
County of Middlesex

On this 25th day of May, 2004, before me, the undersigned  
notary public, personally appeared **Vladimir A. Zilberstein**,

☒ personally known to me, or

☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and  
acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL) Kathleen M. Surprenant Notary Public

Kathleen M. Surprenant (print name)

My Commission expires 1/22/2010

Inventor's Signature: David C. Grundy  
David C. Grundy

State/Commonwealth  
of Massachusetts  
County of Middlesex

On this 11th day of May, 2004, before me, the undersigned  
notary public, personally appeared **David C. Grundy**,

☒ personally known to me, or

☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and  
acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL) Kathleen M. Surprenant Notary Public

Kathleen M. Surprenant (print name)

My Commission expires 1/22/2010

Inventor's Signature: Andrew P. Washabaugh  
Andrew P. Washabaugh

State/Commonwealth

of CALIFORNIA

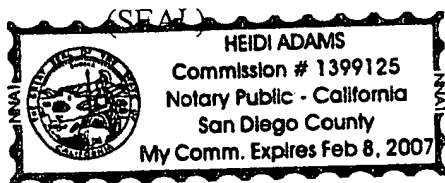
County of SAN DIEGO

On this 29 day of May, 2004, before me, the undersigned notary public, personally appeared **Andrew P. Washabaugh**,

☐ personally known to me, or

☒ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/~~she~~ signed the foregoing instrument as his/~~her~~ free act and deed.



Heidi Adams Notary Public  
Heidi Adams (print name)  
My Commission expires 02 / 08 / 07